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PATENT
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IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Nobuyuki TAKAKUWA et al.

Conf. 2952

Application No. 10/530,031

Group 2621

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Examiner H. Shibru

INFORMATION RECORD MEDIUM, INFORMATION RECORD
APPARATUS AND METHOD, INFORMATION REPRODUCTION
APPARATUS AND METHOD, INFORMATION RECORD REPRODUCTION
APPARATUS AND METHOD, COMPUTER PROGRAM FOR RECORD
OR REPRODUCTION CONTROL, AND DATA STRUCTURE
CONTAINING CONTROL SIGNAL

AGENDA

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

21. (currently amended) An information record medium on which there are recorded:

a series of content information which is constructed from at least one elementary stream and which is stored as a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream;

menu information, which is constructed from at least one elementary stream and which is stored in the plurality of packets, for displaying at least one menu-button of which is to be superimposed on a display-screen of said content information during reproduction of said content information;

play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproducing; and

object information for indicating a relationship between packets and the elementary stream of each of the content information and the menu information, the object information further includes indicating an address of the content information which is specified by the item information.

said play list information including: item information for specifying each item which constitutes said content information by indicating both of a reproduction start time and a reproduction end time of the item; and slave item information for specifying said menu information as a slave item,

wherein the item information includes information which indicates an ID number of the slave item information,

Deleted: related to

Deleted: and

the menu information includes information for indicating a number of the menu-button which is displayed on a display-screen,

each of the content information, the play list information and object information is recorded into a different area, respectively.

REMARKS

Applicants believe that the claims as previously present are in condition of allowance. Amendments above are an example of possible amendments that may or may not be made and do not reflect a commitment on part of the Applicants to amend the claims in such a manner.

The Office states that "Kato discloses [...] the item information includes information related to the slave item information (see paragraph 0307, where the prior art teaches the field of `ref_thumbnail_index` indicates the information of a thumbnail picture representative of the `PlayList` (hence `playlist` is related), see also figure 13; the `playitem` includes content, thumbnail extracted from the content , i.e. `playitem` information includes information related to thumbnail)".

However, according to the present invention, (i) the item information specifies the item (i.e. the content information) and (ii) the slave item information specifies the slave item (i.e. the menu information which is superimposed on the displayed content information). According to the disclosure of Kato, (i) the `PlayItem` included in the `PlayList` specifies one part of the AV stream (see paragraph 0205 and Fig. 2) and (ii) the `ref_thumbnail_index` specifies the thumbnail on the menu-screen which is superimposed on the displayed AV stream(see paragraph 0534).

Considering the above relationship between the item

information (PlayItem) and the slave item information (ref_thumbnail_index), paragraph 0307 of Kato merely discloses that the field of ref_thumbnail_index, which may corresponds to the "slave item information" of the present invention, indicates the information related to the PlayList including PlayItem, which may corresponds to the "item information" of the present invention. Namely, Kato does not disclose the PlayList indicates (or includes) the information related to the ref_thumbnail_index.

Thus, Kato does not disclose the novel feature of the present invention such that "the item information includes information related to the slave item information".

The applicant has a plan to amend the expression "the item information includes information related to the slave item information" in each claims into "the item information includes information which indicates an ID number of the slave item information". This amendment is based on page 77 line 22 to page 78 line 5 of the Specification.

As described in the above comment No. 1.1, Kato does not disclose the novel feature of the present invention such that "the item information includes information related to the slave item information". Namely, as described in the above comment No. 1.1, Kato does not disclose that the field of ref_thumbnail_index indicates information related to the PlayList including PlayItem. Therefore, it is obvious that Kato does not disclose the novel feature of the present invention such that "the item information

includes information which indicates an ID number of the slave item information". Namely, it is obvious that Kato does not disclose that the field of ref_thumbnail_index indicates the ID number of the PlayList including PlayItem.

The applicant has a plan to add the expression "each of the content information, the play list information and object information is recorded into a different area, respectively". This amendment is based on page 34 line 22 to page 35 line 9 of the Specification and Fig. 3.

Each of or a combination of Kato and Morris (US2001/0026561A1) does not disclose, teach or suggest that each the AV stream (or the PlayList) disclosed in Kato and the stream mapping information disclosed in Morris is recorded into a different area, respectively.

In addition, Kato disclose that the AV stream (i.e. the transport stream, see paragraphs 0174 to 0176 of Kato) is recorded in the M2TS directory (see paragraph 0260 of Kato). On the other hand, Morris discloses that the stream mapping information is included in the transport stream (see paragraph 0017 of Morris). This means that Kato suggested that the stream mapping information is recorded into the same recording area into which the AV stream is recorded. Thus, Each of or a combination of Kato and Morris does not disclose, teach or suggest that each the AV stream disclosed in Kato and the stream mapping information disclosed in Morris is recorded into a different

area, respectively.

Incidentally, the other cited references (Kawamura (US 6,453,110B) and Moriss) does not disclose the above novel feature.

The applicant has a plan to add the expression "the object information further includes indicating an address of the content information which is specified by the item information". This amendment is based on page 63 line 23 to page 64 line 3 of the Specification, because Morris does not disclose that the stream mapping information further includes the address of the AV data.

Incidentally, the other cited references (Kato, Kawamura (US 6,453,110B) and Moriss) does not disclose the above novel feature.

In the **final** Office Action of February 4, 2010, the Office noted that claims 21-35 were pending and rejected claims 21-35. In this amendment claims 21, 25-27, 29-32, 34 and 35 have been amended, no claims have been canceled, and, thus, in view of the foregoing, claims 21-35 remain pending for reconsideration which is requested. No new matter has been added. The Office's rejections are traversed below.

REJECTIONS under 35 U.S.C. § 103

Claims 21-35 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kato, U.S. Patent Publication No. 2007/0286577 in view of Kawamura, U.S. Patent No. 6,453,110 in view of Bak, U.S. Patent Publication No. 2005/0031311. The Applicants respectfully disagree and traverse the rejection with an argument and amendment.

Claim 21 has been amended to recite "a series of content information ***which is constructed from at least one elementary stream and which is stored as a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream;*** menu information, ***which is constructed from at least one elementary stream and which is stored in the plurality of packets,*** for displaying ***at least one menu-button*** of which is

to be superimposed on a display-screen of said content information during reproduction of said content information; play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproducing; **and object information for indicating a relationship between packets and the elementary stream of each of the content information and the menu information**, said play list information including: item information for specifying each item which constitutes said content information by indicating both of a reproduction start time and a reproduction end time of the item; and slave item information for specifying said menu information as a slave item, **wherein the item information includes information related to the slave item information, and the menu information includes information for indicating a number of the menu-button which is displayed on a display-screen"** (Emphasis added) Claims 25, 26, 30, 31 and 35 and dependent claims have been amended consistent with the amendment to claim 21.

Support for various features may be found, for example, as follows: "the item information includes information related to the slave item information" on page 77, line 22 to page 78, line 5 of the Specification; "object information for indicating a relationship between packets and the elementary stream of each of the content information and the menu information" on page 44, lines 13 to 23 of the Specification; and "each of the content

information and the menu information is constructed from at least one elementary stream and which is stored as (or in) a plurality of packets, each of the plurality of packets stores a fragment of the elementary stream" on page 41, line 21 to page 42, line 23 of the Specification. The Applicants submit that no new matter is believed to have been added by the amendment of the claims.

Each of and a combination of Kato, Kawamura and Bak does not disclose the first feature of the present invention such that "the item information includes information related to the slave item information," as in claim 21.

Kato discusses that (i) the AV stream (content information), which is to be reproduced, is specified by the PlayItems (item information) included in the selected PlayList (see Kato ¶¶ 0190 and 0205) and (ii) the thumbnail picture (menu information), which is to be reproduced, is specified by using the index number (slave item information) "ref_thumbnail_index" (see Kato ¶ 0274).

However, Kato does not discuss that the PlayItems (or the PlayList) includes information related to the index number "ref_thumbnail_index". More specifically, although Kato discusses that PlayItem is represented by a pair of an IN-point and an OUT-point on the time axis (see Kato ¶ 0205), Kato does not disclose the relationship between the PlayItems and the index number "ref_thumbnail_index" at all.

In addition, each of Kawamura and Bak does not disclose

the above first feature. Therefore, each of and a combination of Kato, Kawamura and Bak does not disclose, teach or suggest the above first feature of the present invention.

Each of and a combination of Kato, Kawamura and Bak does not disclose the second feature of the present invention such as "object information for indicating a relationship between packets and the elementary stream of the menu information," as in claim 21.

Kato discusses that the EP_map, which is a list of entry point (EP) data extracted from the elementary stream and has the address information used to find the site of entry points in the AV stream, is used to reproduce the AV stream (see Kato ¶¶ 0232 and 0233). However, Kato does not disclose that the EP_map is used to reproduce the thumbnail picture. Namely, Kato merely discloses the EP_map related to the AV stream and does not disclose the EP_map related to the thumbnail picture.

Furthermore, Kato discusses that the database information including the thumbnail picture is not multiplexed and packetized by the multiplexer 16 and the source packetizer 19 (see Kato ¶¶ 0187 to 0189 and Fig. 1, in which the database information is directly inputted into the ECC encoder 20).

Namely, Kato does not disclose that the thumbnail picture is constructed from the elementary stream. Thus, it hardly possible that Kato discloses the object information for indicating a relationship between packets and the elementary

stream of each of the content information and the menu information.

In addition, each of Kawamura and Bak does not disclose the above second feature. Therefore, each of and a combination of Kato, Kawamura and Bak does not disclose, teach or suggest the above second feature of the present invention.

For at least the reasons discussed above, Kato, Kawamura and Bak, taken separately or in combination, fail to render obvious claims 21, 25, 26, 30, 31 and 35 and the claims dependent therefrom.

Withdrawal of the rejections is respectfully requested.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. § 103. It is also submitted that claims 21-35 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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